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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,268	06/21/2001	Koji Takeguchi	100794-09745(FUJR 18.748)	6901

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EXAMINER	
PHILPOTT, JUSTIN M	

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/886,268	TAKEGUCHI ET AL.	
	Examiner	Art Unit	
	Justin M Philpott	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 June 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) *10-14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed June 17, 2004 have been fully considered but they are not persuasive.

Applicant argues (pages 5-9) that applicant's invention is distinct from the teachings of Bleickardt and Cioffi specifically because applicant's invention is directed towards the dividing of concatenation signals which is controlled freely according to the state of a transmission line, having the capability to generate a variety of concatenation signals according to the available bit rate of a transmission line whereby an increase in transmission efficiency can be achieved from properly dividing and restoring concatenation signals, wherein such a teaching has not been provided by the cited prior art. Applicant provides the example of dividing an STS-192c concatenated signal into twenty STS-3c concatenation signals, three STS-12c concatenation signals, and two STS-48c concatenation signals whereby more effective utilization of existing networks on which bit rates are limited can be achieved (pages 6-7). However, such features are not evident in applicant's amended claims. That is, applicant's inclusion of a "concatenation signal to generate a plurality of divided signals which are pseudo concatenation signals having a SONET or SDH multiplexed interface, the bit rate of which is lower than that of the original concatenation signal, according to a bit rate of the transmission line" in the amended claims does not reflect the above-mentioned features of applicant's invention. Thus, applicant's argument with respect to these teachings is moot. Furthermore, these newly added limitations to the claims are clearly taught by Bleickardt as discussed in the following action.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,461,622 to Bleickardt et al.

Regarding claims 1, 8 and 9, Bleickardt teaches a transmission system for controlling the transmission of a concatenation signal via a path, the system comprising: a sending apparatus (e.g., 200, see FIG. 2) including: signal dividing means (e.g., via combination of 205, 208, 211-213, 216-218) for dividing the concatenation signal (e.g., 201) to generate a plurality of divided signals (e.g., 202-204) which are pseudo concatenation signals having a SONET or SDH multiplexed interface (e.g., STS-3c, see col. 2, lines 44-61 and col. 7, line 66 – col. 8, line 12), the bit rate (e.g., 149.760 Mb/s, see col. 8, lines 3-12) of which is lower than that of the original concatenation signal according to a bit rate available for transmission (e.g., super-rate signal at a rate greater than the payload rate of the STS-3c signal, see col. 8, lines 3-12); guarantee information adding means (e.g., overhead inserters 217) for adding guarantee information (e.g., Stuffing Indicator and overhead bytes, see col. 4, line 30 – col. 6, line 5), for guaranteeing the continuity of the divided signals (e.g., see col. 6, lines 31-65 regarding Stuffing Indicator and overhead bytes extracted and evaluated to provide proper destuffing and alignment), to each of the divided signals to generate transmission signals; and signal sending means (e.g., 218) for

sending the transmission signals; and a receiving apparatus (e.g., 500 in FIG. 5) including: a signal receiving means (e.g., via combination of 504-508) for receiving the transmission signals (e.g., 501); and signal restoring means (e.g., via combination of 509-511) for restoring the original concatenation signal by constructing the divided signals (e.g., at output of 511) on the basis of the guarantee information (e.g., see col. 6, line 16 – col. 7, line 48).

Regarding claim 2, Bleickardt teaches the guarantee information adding means adds at least one of information regarding the type of the concatenation signal (e.g., see col. 4, lines 30-59 regarding the number of fixed stuffing bytes which indicate a certain signal rate), the frame number of the concatenation signal (e.g., see col. 5, lines 45-64 regarding frame reference bytes), and a division number (e.g., Stuffing Indicator byte, see col. 4, line 22 – col. 5, line 7) at the time of dividing the concatenation signal to the divided signal as the guarantee information.

Regarding claim 3, Bleickardt teaches the guarantee information adding means adds the guarantee information in empty bytes of a path overhead (e.g., via path overhead generator, see col. 5, lines 45-64) for the divided signal.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bleickardt in view of U.S. Patent No. 6,473,438 to Cioffi et al.

Regarding claim 4, Bleickardt teaches the transmission system discussed above regarding claim 1, however, may not specifically disclose the receiving apparatus further includes delay information notifying means for giving the sending apparatus delay information regarding delays which have occurred at the time of receiving the transmission signals.

Cioffi also teaches a transmission system for controlling the transmission of a multiplexed signal via a path, and further, Cioffi teaches providing improved synchronization upon experiencing delays. Specifically, Cioffi teaches a receiving apparatus (e.g., central unit 10) further includes delay information notifying means (e.g., delay correction information, see col. 15, line 62 – col. 16, line 20) for giving a sending apparatus (e.g., first remote unit 15) delay information regarding delays which have occurred at the time of receiving the transmission signals. Cioffi further discloses that the teachings are applicable to a wide variety of data transmission systems including systems utilizing fiber for transmission path means (e.g., see col. 3, lines 10-16; see also col. 5, lines 48-58 regarding additional applicability). The delay correction information teachings of Cioffi provides improved synchronization for a plurality of signals transmitted along a common path whereby a receiving apparatus (e.g., 10) can accurately coordinate and reliably interpret a plurality of multiplexed signals having various delays (e.g., see col. 2, lines 45-51; see also col. 2, line 65 – col. 5, line 58). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the delay correction information teachings of Cioffi to the transmission system of Bleickardt in order to provide improved synchronization for a plurality of signals transmitted along a common path whereby a receiving apparatus can accurately coordinate and reliably interpret a plurality of multiplexed signals having various delays (e.g., see col. 2, lines 45-51).

Regarding claim 5, Cioffi further teaches, on the basis of delay information, the signal sending means (e.g., at remote unit) sets the bit rate (e.g., data rate, see col. 4, line 64 – col. 5, line 6) of each transmission signal variable and makes delay correction (e.g., see col. 3, lines 25-39).

6. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bleickardt in view of Cioffi, further in view of applicant's admitted prior art.

Regarding claims 6 and 7, these claims were rejected in the previous office action by the Examiner taking official notice that the limitations recited in these claims are well known in the art. In applicant's response to the previous office action, applicant has not traversed the Examiner's assertion of official notice or applicant's traverse is not adequate. Therefore, in accordance with MPEP 2144.03(C), the limitations recited in these claims comprise well-known art and are hereafter taken to be admitted prior art.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M Philpott whose telephone number is 571.272.3162. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on 571.272.3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Justin M Philpott

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